IN THE CLAIMS

1. (Currently Amended) A system for minimizing the loss of information in cordless communications, comprising:

a first data station having control logic, the control logic operable to:

establish a plurality of individual communication channels needed to transmit information between the first data station and a second data station, each of the channels associated with a unique channel frequency; select a first unique channel frequency to be used for the first channel between the two data stations; ~~access a plurality of frequency sets, each frequency of a frequency set corresponding to a channel; block any poor quality frequency set from the plurality of frequency sets;~~ determine based on interference of the first channel during transmission ~~parameters relating to~~ a spectral separation between ~~each of the channels~~ the first channel and at least one other channel~~, the spectral separation describing a separation between a pair of unique channel frequencies associated with the channels~~; and select a unique channel frequency ~~frequencies~~ for the ~~remainder of the plurality of channels~~ the at least one other channel based on the first channel and the determined spectral separation of the at least one other channel ~~in response to the determined parameters by selecting a frequency from each frequency set, each pair of unique channel frequencies having a spectral separation~~; and

response logic residing in the second data station, the response logic operable to receive the information from the first data station on the plurality of communication channels.

2. (Original) The system of Claim 1, wherein the channels are operable to both transmit and receive information in duplex.

3. (Currently Amended) The system of Claim 1, wherein the interference is measured by a bit error rate of the first channel ~~the parameters comprise a frequency offset to be used between each unique channel frequency~~.

4. (Currently Amended) The system of Claim ~~1~~ 3, wherein the bit error rate comprises either a short-term error rate or a long-term error rate ~~the parameters comprise~~

~~optimal spectral spacing between each unique channel frequency used for the individual channels~~.

5. (Original) The system of Claim 1, wherein each channel frequency is changed using a frequency hopping scheme.

6. (Original) The system of Claim 1, wherein the control logic is further operable to:

a) model interference encountered over individual channels between the data stations; and

b) select parameters that minimize the loss of information over each of the individual channels.

7. (Currently Amended) A method for minimizing the loss of information in cordless communications, comprising:

a) establishing a plurality of individual communication channels between at least two data stations~~, accessing a plurality of frequency sets, each frequency of a frequency set corresponding to a channel, and blocking any poor quality frequency set from the plurality of frequency sets~~;

b) selecting a first unique carrier frequency to be used for the first of the plurality of channels;

c) determining ~~parameters~~ based on interference of the first of the plurality of channel during transmission a spectral separation between the first of the plurality of channels and at least one other channel relating to achieving a maximum throughput of information over the channels between the data stations; and

d) selecting ~~additional~~ a unique carrier frequency ~~frequencies to be used~~ for the ~~remainder of the plurality of channels~~ at least one other channel based on the first unique carrier frequency and the determined spectral separation of the at least one other of the plurality of channels~~, in response to the determined parameters by selecting a frequency from each frequency set~~.

8. (Original) The method of Claim 7, wherein the maximum throughput of information over the channels is equal to the maximum throughput of information over the plurality of channels.

9. (Currently Amended) The method of Claim 7, wherein the determining step further comprises measuring error rates for a plurality of frequencies usable for each of the channels.

10. (Original) The method of Claim 7, wherein the determining step further comprises:

a) modeling interference over one of the channels; and

b) selecting parameters that minimize the loss of information over the plurality of channels.

11. (Currently Amended) The method of Claim 7, further comprising determining parameters relating to achieving a maximum throughput of information over the channels between the data stations at predetermined intervals of time.

12. (Currently Amended) The method of Claim 7, further comprising changing the ~~unique frequencies~~ frequency of each channel utilizing a frequency hopping scheme.

13. (Currently Amended) The method of Claim 12, wherein the selecting ~~additional frequencies~~ a unique frequency step comprises separating all of the frequencies at an optimal spectral separation.

14. (Currently Amended) The method of Claim 7, further comprising selecting ~~all of~~ the unique ~~frequencies~~ frequency of the at least one other channel from a table.

15. (Currently Amended) A method for minimizing the loss of information in cordless communications, comprising:

a) providing at least two data stations having a plurality of communication channels to transmit information between the data stations~~, accessing a plurality of frequency sets, each frequency of a frequency set corresponding to a channel, and blocking any poor quality frequency set from the plurality of frequency sets~~;

b) determining a first unique carrier frequency for the first of the channels between the data stations;

c) determining based on interference during transmission ~~parameters relating to~~ a spectral separation between the first of the channels and ~~required for~~ the next one of the channels~~, the spectral separation describing a separation between a pair of carrier frequencies associated with the channels~~;

d) repeating the steps ~~of determining a first unique carrier frequency and determining parameters~~ for another channel; and

e) selecting unique carrier frequencies for ~~the remainder~~ all of the plurality of channels based on the determined spectral separation between the first channel and each of the remainder of the plurality of channels ~~in response to the determined parameters by selecting a frequency from each frequency set, each pair of unique carrier frequencies having a spectral separation~~.

16. (Currently Amended) The method of Claim 15, wherein the determining ~~parameters~~ a spectral separation step further comprises determining parameters to yield an optimal spectral separation.

17. (Original) The method of Claim 15, wherein the determining parameters step further comprises:

a) evaluating whether any signal source is interfering with the channel between the data stations on the first unique carrier frequency; and

b) selecting another carrier frequency for the channel.

18. (Currently Amended) The method of Claim ~~15~~ 16, wherein the parameters represent an error rate measured over the channel.

19. (Original) The method of Claim 15, further comprising the data stations transmitting information that is time division multiplexed and time division duplexed over the communication channels.

20. (Previously presented) The method of Claim 15, wherein steps (b)-(e) are performed at regular intervals of time.

21. (Currently Amended) An apparatus for minimizing the loss of information in cordless communications comprising control logic, the control logic operable to:

select a first unique channel frequency associated with one of a plurality of communication channels;

access a plurality of frequency sets, each frequency of a frequency set corresponding to a channel;

block any poor quality frequency set from the plurality of frequency sets;

determine based on interference of at least one channel during transmission one or more parameters relating to a spectral separation between at least two of the channels, the spectral separation describing a separation between a pair of unique channel frequencies associated with the channels; and

select at least one unique channel frequency for the remainder of the plurality of channels based on the related spectral separation and selected from at least one of the plurality of frequency sets ~~using the one or more determined parameters by selecting a frequency from each frequency set, each pair of unique channel frequencies having a spectral separation~~.

22. (Cancelled)